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**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Docket Number (Optional)

944-006.006-1

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on December 19, 2006

Signature

Typed or printed name Kathleen Sipos

Application Number

09/867,049

Filed

May 29, 2001

First Named Inventor

Kai NYMAN

Art Unit

2137

Examiner

Zachary A. Davis

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

☐

attorney or agent of record.  
Registration number \_\_\_\_\_

☒

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 58,051

Signature

Keith R. Obert

Typed or printed name

203-261-1234

Telephone number

December 19, 2006

Date

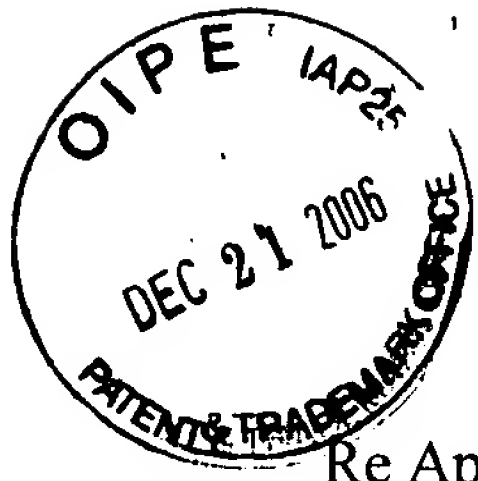
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

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\*Total of \_\_\_\_\_ forms are submitted.

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Attorney Docket No. NC28444A(944-006.006-1)

Serial No. 09/867,049

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Application of: **Kai NYMAN**

Serial No.: **09/867,049**

Examiner: **Zachary A. Davis**

Filed: **May 29, 2001**

Group Art Unit: **2137**

For: **AUTHENTICATION IN DATA COMMUNICATION**

Mail Stop AF  
Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

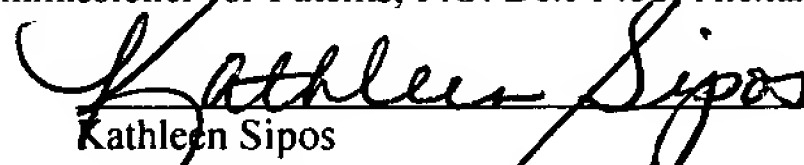
Sir:

This Request for Review is filed in response to the final Office Action of September 19, 2006.

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CERTIFICATE OF MAILING

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Kathleen Sipos

Dated: Dec 19, 2006

REMARKS

Claims 1-14, 25-31, 35 and 37-54 were examined by the Office, and all claims are rejected. Applicant respectfully requests review of the final rejections to the claims in light of the following discussion. The Office has committed clear error by failing to show that all of the limitations recited in the claims are disclosed or suggested by the cited references. See MPEP § 2143.03. Furthermore, the Office has also committed clear error by failing to show proper motivation to combine the cited references. See MPEP § 2143.01. Accordingly, applicant respectfully requests withdrawal of the final rejections.

This Request for Review is submitted along with a Notice of Appeal.

Claim Rejections Under § 103

At section 5, on page 5 of the final Office Action claims 1-10, 13-14, 25-31, 35, 37-47 and 50-54 are rejected under 35 U.S.C. § 103(a) as unpatentable over Heikkinen et al. (WO 00/58920) in view of Turtiainen (U.S. Patent No. 6,430,407). Applicant respectfully submits that independent claim 1 is not disclosed or suggested by Heikkinen and Turtiainen, alone or in combination, because the cited references fail to disclose or suggest all of the limitations recited in claim 1. Independent claim 1 recites “receiving at a mobile client from an authentication block (of a mobile telecommunication network) at least one challenge and at least one first secret based on a subscriber’s secret specific to a subscriber identity.” Claim 1 further recites, “receiving at the mobile client at least one second secret in response to at least one challenge, and using the second secret for authenticating the mobile client.” Applicant respectfully submits that the cited references do not disclose or suggest a first secret and a second secret, and the Office has failed to show that the cited references teach these limitations of claim 1.

On pages 5 and 6 of the final Office Action, the Office rejects claim 1 by reference to Heikkinen. However, no where in the rejection of claim 1 does the Office state that Heikkinen discloses or suggests the first secret and the second secret recited in claim 1. On page 3 of the final Office Action in responding to applicant’s previous arguments, the Office states that “the claimed ‘second secret’ corresponding to the private key in Heikkinen.” However, if the private key of Heikkinen corresponds to the “second secret” of claim 1 then Heikkinen cannot disclose or suggest the first secret recited in claim 1, because Heikkinen only discloses that the private key is used for authentication, and does not disclose or suggest the use of another key or secret.

Heikkinen only discloses that the payment instrument unit receives a challenge from the data transmission network, and then transmits the challenge to the buyer/mobile station. See Heikkinen page 7, lines 13-15. The private key, which may be stored in the smart card of the mobile station, is then transmitted to the payment instrument unit by the buyer/mobile station, and then the private key is further transmitted to the data transmission network. See Heikkinen page 7, lines 15-16; see also Figure 7 (authentication challenge (701); answer to authentication (702)). Therefore, Heikkinen fails to disclose or suggest receiving at the mobile client from the authentication block at least one challenge and at least one first secret based on a subscriber's secret specific to the subscriber identity, because Heikkinen only discloses that a single private key is used for the authentication transaction, instead of a first secret and second secret, as recited in claim 1.

Furthermore, Turtiainen also fails to disclose or suggest the first secret and the second secret recited in claim 1. Therefore, since the cited references individually fail to disclose or suggest all of the limitations recited in claim 1, it necessarily follows that even if the references are combined they will also fail to disclose or suggest all of the limitations recited in claim 1. Turtiainen only discloses that an application (60) provides a challenge (61) to a user (22), which may then be entered into or communicated with a mobile station (1) of the user. See Turtiainen column 10, lines 22-28. A secret stored in the SIM of the mobile station (1) may be used to calculate an answer (27, 62) that may be used to authenticate the user interface (16) to the application (60). However, the secret stored in the SIM is never transmitted to the user interface (16), and furthermore the application (60) only transmits the challenge (61) to the user interface (16), and not at least one first secret based on a subscriber's secret specific to the subscriber identity, as recited in claim 1. Therefore, none of the cited references disclose or suggest receiving at the mobile client at least one first secret, and at least one second secret, and even if the references are combined they still fail to disclose or suggest these limitations recited in claim 1. For at least this reason, claim 1 is not disclosed or suggested by the cited references, alone or in combination, and applicant respectfully requests withdrawal of the rejection to claim 1.

In addition, claim 1 is not disclosed or suggested by the cited references because there is no motivation to modify the teachings of Heikkinen by including an additional communication system to which a client is to be authenticated, because it is the terminal equipment of Heikkinen that is authenticated to the vending machine. The Office asserts on page 3 of the final Office

Action that the payment instrument unit corresponds to the “mobile client” recited in claim 1. However, claim 1 specifically recites that the “mobile client” is to be authenticated to a communication system. In Heikkinen, only the user of the terminal equipment is authenticated (see Heikkinen page 6, line 19), and this authentication is to the payment instrument unit of a vending machine. See Heikkinen page 6, line 26-27 (the payment instrument unit is at least partly installed inside the vending machine). Therefore, even when the data transmission network is used to authenticate the buyer/mobile station, the authentication is in relation to the payment instrument unit, i.e. so that the buyer/mobile station can access the payment instrument unit and not the data transmission network. There is no suggestion, motivation or teaching that it would be desirable to authenticate the terminal equipment to a separate communication system, than the one that the buyer/mobile station belongs to. The motivation to combine and modify the references suggested by the Office, i.e. to free a user from the need to carry a separate authentication device, is irrelevant because Heikkinen already eliminates the need for a user to carry a separate authentication device when accessing vending machines, since the user’s mobile terminal can be used for authentication.

Furthermore, there is no motivation to modify the payment instrument unit to make it mobile, as claim 1 recites “mobile client.” If the payment instrument unit was mobile, such modification to the system of Heikkinen would change the principle of operation of Heikkinen because the payment instrument unit is connected to the vending machine, which is not considered to be a “mobile” device. See MPEP § 2143.01 VI. If the payment instrument unit were “mobile,” it would have to be disconnected from the vending machine. The operation of Heikkinen would be changed because the payment instrument unit would be a stand alone device disconnected from the vending machine, and the security of the payment instrument unit may thereby be compromised. Therefore, for at least these additional reasons, the cited references, either alone or in combination, fail to disclose or suggest all of the limitations recited in claim 1. As such, claim 1 is patentable over the cited references, and applicant respectfully requests withdrawal of the rejection to claim 1.

Independent claims 13, 25, 30, 35, 37, 38 and 50 all contain limitations similar to those recited in claim 1, and are rejected for the same reasons as claim 1. Therefore, for at least the reasons discussed above in relation to claim 1, claims 13, 25, 30, 35 37, 38 and 50 are not

disclosed or suggested by the cited references, alone or in combination, and applicant respectfully requests withdrawal of the rejections to these claims.

Claims 2-10, 14, 26-29, 31, 39-47 and 51-54 all ultimately depend from an independent claim, and are patentable over the cited references at least in view of their dependencies.

Claims 11 and 12 are rejected under 35 U.S.C. § 103(a) as unpatentable over Heikkinen in view of Turtiainen and Lightman (U.S. Patent No. 6,711,414). Claims 11 and 12 ultimately depend from independent claim 1, and are patentable over the cited references at least in view of their dependencies.

#### Conclusion

The applicant respectfully submits that the application is in condition for allowable and such action is earnestly solicited. The undersigned hereby authorizes the Commissioner to charge any fee deficiency required to submit this response to deposit account 23-0442.

Respectfully submitted,

Date: 19 December 2006



Keith R. Obert  
Attorney for the Applicant  
Registration No. 58,051

KRO/kas  
Ware, Fressola, Van Der Sluys  
& Adolphson LLP  
755 Main Street, P.O. Box 224  
Monroe, CT 06468  
(203) 261-1234  
Customer No. 004955